In addition to buying and fielding the modern weapons discussed above, the Army hopes to continue improving its existing weapons and to develop new, improved systems. To this end, the Army wants to achieve 5 percent

engine's and is used to defend deployed troops or specific high-value targets, such as supply depots.

Multiple-Launch Rocket System (MLRS)--The MLRS is a truck-mounted system that can fire 12 free-flight rockets to ranges over 30 kilometers (km) in less than one minute. Its primary targets are enemy artillery, air defense weapons, and other light material and personnel targets, such as assembly areas and command posts.

Single-Channel Ground and Airborne Radio System (SINCGARS)--The SINCGARS family of radios will provide the Army with a lightweight and secure means of transmitting both voice and data signals. As the name suggests, SINCGARS radios will come in models suitable for transportation in backpacks, ground vehicles, and aircraft.

Army Tactical Missile System (ATACMS)--The ATACMS missile will be launched from unmodified MLRS launchers. It is currently in development, not yet in production, and is designed to attack enemy targets far behind enemy lines. Unlike the free-flight MLRS rocket, the ATACMS missile will be guided to its target where it will fire one or more submunitions.

Mobile Subscriber Equipment (MSE)--The MSE, which entered production in December 1985, is a field telephone system, similar to mobile automobile telephones, that will be capable of transmitting voice, data, or facsimile messages throughout the battle area.

Remotely Piloted Vehicle (RPV)--The Army's current RPV system, the Aquila, is a small, propeller-driven pilotless aircraft with a 13-foot wingspan. It is controlled through a radio link by an operator located in a mobile ground station. The RPV can relay television pictures taken by a camera under its fuselage back to the operator, who controls the direction and magnification of the camera. The Aquila also carries a laser to designate targets for artillery.

TABLE 6. ARMY PERSONNEL, FISCAL YEARS 1987 AND 1991

	Beginning 1987	End 1991
Active	780,800	781,000
National Guard	450,500	492,100
Army Reserve	310,700	320,000
Total Reserves	761,200	812,100
Total Personnel	1,542,000	1,593,100

SOURCE: Letter from Lt. Gen. Carl E. Vuono, Deputy Chief of Staff for Operations and Plans, to Mr. Robert Hale, CBO, February 1986.

real growth in its research and exploratory development accounts; these fund the basic research designed to produce advanced technologies that could be applied to weapons. 8/

The Army's continuing modernization effort is designed to address the perceived imbalance between the Warsaw Pact and NATO conventional forces available for a conflict in Central Europe. The Army feels that technologically sophisticated weapons could help U.S. forces overcome the Warsaw Pact's numerical superiority. The Army's newest weapons and supporting systems--including air defense missiles, radios, and target-finding systems--are designed to operate in an intense battle where the enemy would employ sophisticated countermeasures such as jamming and decoys. The Army's modernization effort is, therefore, aimed at improving its ability to defend Europe in the event of a Soviet attack.

Force Structure

The Army envisions little change in its force structure over the next five years. Specifically, it plans to maintain its current organization of 18 active and 10 reserve divisions. Within this overall structure, however,

8. The engineering development and advanced development accounts provide funds, primarily to contractors, to design and build prototypes of specific new weapon systems.

smaller units will be added or disbanded. Specifically, three separate brigades will be formed--one in the active force and two in the reserves; an additional Special Forces Group will be created in the active Army; and two armored cavalry regiments in the reserves will be dissolved.

The Army is planning to form these additional units while keeping the active Army end strength at about 781,000 through 1991. Active personnel to fill the additional active combat units, therefore, will have to come from units currently performing support roles, such as transport or ammunition handling units. Units will still be needed to perform support missions, however. The Army's solution has been to transfer many of the support missions to the reserves. Indeed, should war break out in Europe, the reserves would provide 90 percent of all fuel supply units; 75 percent of all ammunition handling units; and 65 percent of all medical services. The Army, therefore, plans to increase the size of its reserve forces (see Table 6). The Army National Guard, which currently has 450,500 personnel, is scheduled to expand to 492,100 people by 1991. The Army Reserve, with an end strength of 310,700 in 1986, would grow to 320,000 by 1991. Thus, the reserve forces, which make up slightly less than half of today's total Army, would constitute the majority by 1991.

CHAPTER II

ESTIMATING THE COSTS OF THE ARMY'S GOALS FOR 1987-1991

Achieving the goals enumerated in the previous chapter obviously carries associated costs. The CBO has estimated the total funding requirements for meeting these goals for fiscal years 1987 through 1991. These estimates are not necessarily the funds that the Congress provided the Army in 1987 nor those the Army will request and receive from 1988 through 1991. Funds actually appropriated in 1987 reflected more stringent fiscal limits than those assumed in formulating the goals, and future Army requests may also have to balance the desirability of some goals against limits on available funds.

ESTIMATING METHODS USED

In projecting the required Army budgets from 1988 through 1991, CBO based them as much as possible on the direct costs of meeting the Army's goals. There were, however, large portions of these budgets that could not be tied directly to any of the Army's stated goals. In particular, the appropriation that pays for day-to-day operations--operation and maintenance--could not be projected based solely on the Army's goals for improving readiness, the area most directly associated with O&M funding. Furthermore, there are no satisfactory methods available to project requirements for future Army O&M needs. (See Appendix A for a more thorough discussion of methods for estimating O&M costs.) Several other, smaller appropriations are also difficult to project--research, development, testing, and evaluation (RDT&E); military construction (MILCON); and family housing--given the lack of specific Army goals relating to these appropriations. The CBO, therefore, used at least two methods to project costs in those accounts that were not amenable to detailed costing. Although the methods used were not totally satisfactory, they did yield budget projections that provide reasonable estimates of the funds that the Army would need to achieve its goals.

Various methods were used to ascribe costs to those Army goals that could be quantified and tied directly to monetary needs. The total Army budget was constructed from six major appropriations--military personnel; operation and maintenance; procurement; RDT&E; MILCON; and family housing. (See box for definitions of the appropriations.) The rest of this

chapter discusses the methods used to project the funds required by each appropriation through 1991 and the detailed results. Readers wishing to concentrate only on the overall funding estimates can skip to page 38.

DEFINITION OF BUDGET APPROPRIATIONS

Operations and Support Appropriations

Military Personnel (MILPER)--This appropriation includes funds for the salaries of all military personnel, both active and reserve. In addition, funds for moving soldiers and their households when they change assignments, housing allowances, and retired pay accrual are also included in this appropriation.

Operation and Maintenance (O&M)--Funds in this appropriation pay for the day-to-day operations of the active and reserve Army. This appropriation includes money to pay for heating facilities, supply operations, training, medical support, utilities, fuel, and civilian support contracts.

Family Housing--Money appropriated for family housing pays for the planning, designing, building, and maintaining of the Army's facilities for housing soldiers and their families. The rent of any leased dwellings is also paid for out of this appropriation.

Investment Appropriations

Procurement--The procurement appropriation provides funds for the purchase of major items--such as aircraft, tanks, missiles, radios, and ammunition--that the Army needs to equip its soldiers.

Research, Development, Testing, and Evaluation (RDT&E)--This appropriation funds all the Army's efforts to design, develop, and test new weapons. Funds to maintain the Army's test ranges are also included here.

Military Construction (MILCON)--All Army major construction, except that associated with family housing, is paid for out of this account. This appropriation also covers all plant improvements, such as new troop housing, dining halls, and maintenance sheds.

Military Personnel

The military personnel appropriation provides pay and allowances for personnel in the active Army, Army Reserve, and Army National Guard. Requirements for funding depend primarily on the number of people in each of these components. The size of the active component of the Army is not currently scheduled to change significantly between now and 1991. Therefore, the size of the account for active military personnel should remain roughly constant for the next five years, except for pay raises. (There would, of course, be changes in personnel costs less directly related to numbers of people--such as travel or changes in pay grade. These changes are not likely to be large, however, and are beyond the scope of this aggregate analysis.) If pay raises keep pace with inflation--a likely prediction for the next five years--then the active military personnel account should remain at roughly the same level, in fiscal year 1987 dollars, from 1987 through 1991. 1/

According to the Army's goals, the reserve component of the Army, in contrast with the active portion, would experience some growth (about 3 percent in end strength) during the next five years. In particular, the number of Army Reserve and National Guard personnel employed full-time by the Army would increase over the next five years--by 7,300 people, or almost 60 percent, for the Army Reserve and 19,900 personnel, or almost 80 percent, for the National Guard. 2/ Full-time reserve personnel provide training and administrative support for the part-time soldiers in reserve units. In addition, full-time reservists provide liaison to the active forces with which the reserve units would fight in the event of a crisis. Both of these factors would contribute to growth in the funds for Army reserve personnel. The total funding required for the planned increase in numbers of reserve personnel and full-time reservists for each of the next five years was supplied to CBO by the Army.

The total funding needed by the Army over the next five years for its military personnel appropriations can be determined by combining the active and reserve portions (see Table 7). Solely because of the planned growth in the size of the reserve component and the accompanying 41 percent real growth in reserve personnel funding from 1987 through 1991, CBO projects

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1. Current accounting practices set the deflator for the military personnel account equal to the military pay raise. Thus, even if pay raises exceeded the rate of inflation or fell below it, personnel costs would remain constant in real terms.

2. Based on data contained in an Information Paper supplied by the Army to CBO on December 13, 1985.

TABLE 7. MILITARY PERSONNEL FUNDING, FISCAL YEARS 1986-1991 a/
(In billions of 1987 dollars)

	Appropriated		Projected			
	1986	1987	1988	1989	1990	1991
Active	21.8	22.4	22.4	22.4	22.4	22.4
Reserves						
Army Reserve	2.2	2.3	2.8	2.9	3.0	3.0
National Guard	3.2	3.3	4.2	4.5	4.7	4.9
Total	27.2	28.0	29.4	29.8	30.1	30.3

SOURCE: Congressional Budget Office projections based on data in Department of Army Information Paper (December 13, 1985).

a. Includes retirement accrual.

that the total military personnel appropriation would grow 8 percent from 1987 through 1991 with an average annual real growth of about 2 percent. This growth is based on Army data and reflects the changes deemed necessary to meet Army goals over the 1987-1991 period. 3/

Operation and Maintenance

The operation and maintenance appropriation (O&M) pays for a diverse group of activities. About 32 percent of the 1986 funds appropriated for O&M paid for most of the Army's civilian employees; the remainder funded, among other things, the nonpay costs of training; equipment maintenance; recruiting; fuel; base operations including utilities, heating, and food services; medical support; and the distribution of supplies. It would be impossible to project such a diverse account based solely on the Army's stated goals which cover only a few of these many areas. Indeed, the major goal related to this account is the Army's desire to increase helicopter flying hours. To obtain the Army's objective of 19.5 hours per crew per month by 1991 for its active duty pilots (as compared with the 1986 level of 14 hours per crew per

3. Note that the funds for 1986 and 1987 have already been appropriated.

month), the Army would have needed to increase funds for helicopter operations from slightly more than $300 million allotted for flying hours in 1986 to $345 million in 1991. The Army's total O&M budget in 1987 was $21.1 billion, however. Thus, achieving the Army's helicopter operations goal would require an insignificant increase in the Army's overall O&M budget.

Unfortunately, accepted analytic techniques do not exist for estimating the total costs of a service's O&M. Most approaches to estimating O&M costs focus on specific portions of the budget rather than the total. 4/ The CBO, however, did not attempt to determine the needs for each particular type of funding, but rather estimated how much might be required in the aggregate if the Army managed the O&M account on the whole as it has in the past. To derive these estimates, CBO used two separate approaches: the ratio-to-force-value estimation and the Army factors method.

Ratio-to-Force-Value (RFV) Estimation. The cost of maintaining and operating the Army should depend, in part, on its size--that is, the more people and associated pieces of equipment that the Army has, the more it is likely to cost to operate, assuming no major change in the types of equipment or operating tempo. Since the number of Army personnel has been and will continue to be relatively constant, any growth in O&M funding that has occurred recently or will be needed in the future would result primarily from an increase in the amount of equipment owned and operated by the Army and, to a lesser extent, from increased aircraft training tempo and the operation of additional bases. 5/ Another possible cause for increased Army operating expenses could be the growing sophistication and complexity of Army weaponry. The modern weapons that the Army is now fielding could require more expensive diagnostic equipment and spare parts, thus costing more on the whole to operate and maintain than older, less sophisticated equipment.

If O&M costs are related primarily to increases in the number and complexity of Army equipment, one could project future O&M costs by as-

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4. See Appendix A for further discussion of the problems associated with estimating O&M costs.

5. Even though in the next five years the Army plans to increase the operating tempo of its aircraft and to buy more communications and electronics equipment than traditional weapons, such as tanks and missiles, the Army's overall operating tempo should remain roughly constant, barring a major conflict, and the bulk of its equipment should continue to consist of tanks, helicopters, and missile systems.

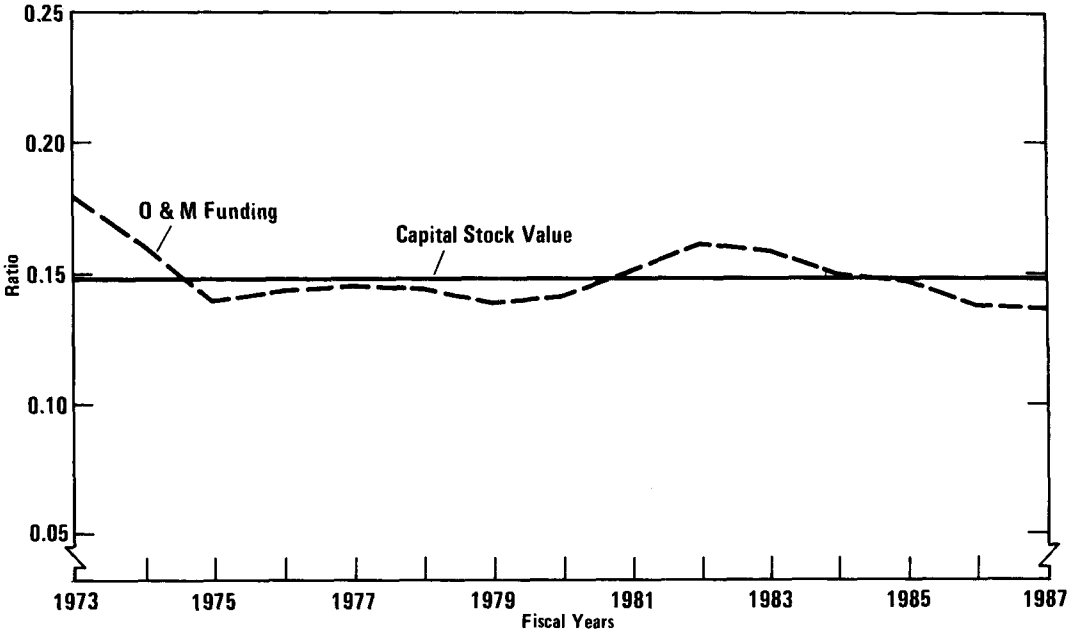
suming that they are proportional to the total value of the Army's equipment, or its capital stock. A direct relationship between O&M funding and the value of the Army's capital stock might seem without strong theoretical support. Indeed, an increase of, say, 10 percent in the value of equipment should not necessarily require 10 percent more funds for bases or medical support because some fixed costs should not have to be incurred. Nor does a relationship between O&M and the capital stock allow for efficiencies that may hold down costs even if weapons' values grow. On the other hand, the historical relationship between O&M and capital stock has been relatively constant since 1973, with total O&M funding for all components of the Army averaging about 15 percent of the total value of the Army's capital stock (see Figure 2). This fairly constant ratio might also reflect the costs of increasing weapons complexity that offset economies achieved by having more weapons or, perhaps, bureaucratic politics that tend to leave shares of a budget unchanged.

Whatever the reason, the constancy of the historical relationship suggests that one possible approach to estimating O&M funding is to assume that Army O&M costs in a given year are equal to about 15 percent of the total value of the Army's capital stock when measured in constant dollars. The resulting estimates should not be interpreted as "needs" for O&M funding that have been derived from a detailed analysis of the Army's goals. Rather, such projections should be treated as a rough estimate of likely costs of O&M, provided that the Army manages its O&M account generally as it has in recent years and continues to operate it at about the same tempo. 6/

The CBO projected the value of the Army's capital stock through 1991 based on the planned introduction of major equipment into the Army's inventory. The resultant real growth in capital stock value from 1987 through 1991 was almost 25 percent. Moreover, the 1987 level of O&M funding was somewhat below the historical average of almost 15 percent--13.7 percent in 1987 versus a 15-year historical average of 14.9 percent. As a consequence of the growth in capital stock and increases that would return the funding level to 15 percent of the value of the capital stock, growth in O&M funding, from the 1987 level through 1991, is projected to be 36 percent, an average annual real growth of 7.9 percent. In budget terms, the Army's

6. Despite the fact that the Army hopes to increase the training tempo of its aircraft, helicopter flying costs account for only a small part of the Army's overall O&M budget. Furthermore, the training tempo for the Army's ground vehicles is projected to remain constant through 1991. Because the Army has many more ground vehicles than aircraft (the Army owned about 15,600 tanks, 18,300 fighting vehicles and armored personnel carriers, and 8,400 helicopters in 1986), the increase in helicopter operating tempo will not greatly affect the Army's **overall** operating tempo.

Figure 2.
Ratio of Operation and Maintenence Funding to Capital Stock Value, Fiscal Years 1973-1987



SOURCE: Congressional Budget Office based on Department of Defense data.

funds for O&M will need to grow from the 1987 level of $22.5 billion to $30.5 billion in 1991.

Army Factors Method. An alternative method for estimating O&M needs is based on data included in the Army's *OMA and MPA Cost Factor Handbook* published in December 1984. 7/ This method for calculating annual O&M costs for active Army forces combines several factors to account for the different aspects of Army operations. One part of the operating cost is related to the number of active-duty personnel, and was set at $8,600 per person (in 1987 dollars) in the Army handbook. This per capita assessment includes funds to pay for training, travel, and medical expenses. Although the Army would like to increase training for helicopter pilots, the portion of the $8,600 allotted to an average soldier's training is relatively small and even a 40 percent increase over five years would have a very small effect on the overall O&M budget. 8/

7. OMA = Operation and Maintenance, Army; MPA = Military Personnel, Army.

8. The 40 percent increase corresponds to the increase in monthly flying hours from 14 in 1986 to 19.5 by 1991.

Another portion of the cost, as in the previous method, was related to the value of the Army's equipment but at a lower ratio--3.5 percent. This factor is related to maintaining the Army's equipment and could increase with operating tempo. Again, however, the portion related to increasing helicopter flying hours would be small.

Yet another portion of annual O&M costs included in the Army's handbook is the depot maintenance program. For this, Army estimates of required funding for the next five years were used. Finally, the Army handbook did not provide a basis for estimating the cost of operations and maintenance performed by civilian personnel. The CBO assumed that the level of funding for civilian salaries included in the Army's O&M account would remain constant at the 1987 level of $6.7 billion through 1991.

The factors discussed above apply only to operation and maintenance for active-duty personnel. Reserve and Guard operations are funded separately and cannot be estimated on the same basis, since the reserve components have completely different operating tempos and procedures from the active Army. Based on the historical relationship between reserve O&M funding and reserve personnel accounts, O&M funding for the reserves was projected for each year at a level equal to 50 percent of the reserve personnel funding for the same year. In this case, the impact of increased total flying hours was assumed to be reflected in the increase in total and full-time reserve personnel.

Using this alternative method based on Army factors, CBO projected that $27.8 billion would be needed for O&M funding in 1991. Although lower than the funding level projected by the previous method (ratio-to-force-value), this amount would represent a 24 percent increase over 1987 levels, and 5.4 percent average annual real growth from 1987 through 1991.

There is no analytical basis for determining which method best estimates likely future O&M costs. Therefore, both methods were used to project a range of Army O&M costs that might be included in total Army budgets to meet Army goals through 1991. It is interesting to note that the latest detailed Army estimates of O&M needs available to CBO (from the Army's Five-Year Defense Plan--or FYDP--for Fiscal Year 1987) fall between the projections resulting from these two methods (see Figure 3). 9/ This might suggest that the two methods bracket likely needs for O&M. On the other hand, as was noted earlier, Army budget estimates reflect not only

9. The FYDP, prepared with the help of the services, is the basis for the Department of Defense's total budget, and describes each service's budget plan for the ensuing five years.

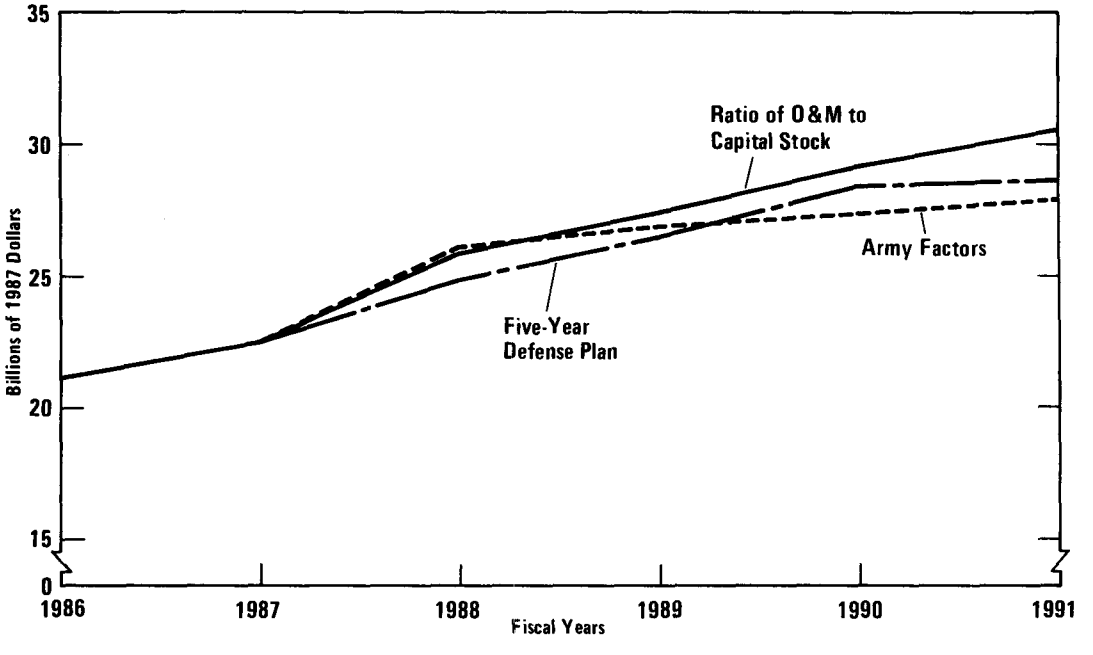
needs (goals) but also fiscal restraints levied on the service by the Administration and the Congress. Therefore, the budget estimates may not fully reflect the Army's objectives as provided to CBO.

Procurement

The procurement appropriation, which has received about a quarter of the Army's total budget for the past few years, is divided into five major accounts: aircraft procurement (APA), missile procurement (MIPA), weapons and tracked combat vehicles (WTCV), procurement of ammunition (PAA), and other procurement (OPA). Each of these accounts is divided into individual line items that contain funds for particular programs, like the M1 tank. Some accounts have a relatively small number of individual programs (for example, APA with only 40 individual items); others, like PAA and OPA, are divided into numerous small programs (PAA with 121 line items in the fiscal year 1987 budget and OPA with 343 items).

The Army provided CBO with modernization goals that laid out the Army's fielding plan for items such as the M1 tank, the Bradley Fighting

Figure 3.
Three Projections for Operation and Maintenence Funding, Fiscal Years 1986-1991



SOURCE: Congressional Budget Office.

Vehicle, the AH-64 helicopter, and seven other major weapons systems. Because weapons must be bought before they can be fielded, the Army's goals dictated the procurement schedules for 10 major programs for the next five years. The CBO ultimately projected costs for these 10 programs based on the Army's fielding goals. These programs, however, constitute about a third of the Army's overall procurement budgets for 1984 through 1988. Furthermore, procurement of 3 of these 10 programs (the M1 tank, the Bradley Fighting Vehicle, and the AH-64 helicopter) is scheduled to be completed by 1990, and, therefore, will not contribute to the 1991 procurement account at all. Clearly, the Army's procurement needs for the years from 1987 through 1991 cannot be predicted solely on the basis of these 10 individual programs.

Projecting Programmed Procurement. The CBO based the bulk of its procurement estimates on requests for funding for all the Army's weapons' programs as spelled out in various documents submitted in support of the President's budget for fiscal year 1987. 10/ These requests reflect the Army's goals for all of its programs *as modified by fiscal restraints*, but they provide the best available data on the hundreds of Army programs for which CBO does not have detailed fielding goals. The budget detail available for programs included in the 1987 budget accounted for 98 percent of the total procurement budget for that year. The procurement budget through 1991 was projected by drawing upon historical precedent.

The programs contained five years ago in the President's budget for fiscal year 1983 accounted for 97 percent of the 1983 procurement account. By 1987, however, these same programs accounted for only 89 percent of the total procurement account. The reason for the reduced fraction is the fact that some Army programs were funded in the fiscal year 1983 procurement budget but not in the 1987 budget since they no longer exist. The CBO, therefore, projected the procurement accounts for 1987 through 1991 based on the assumption that the current Army programs would retain shares similar to those that the 1983 programs held for the subsequent five years.

A similar situation is likely to occur in 1991. Army programs will be introduced between now and 1991 that will require procurement funds, while some current programs will be dropped or phased out. It can be postulated that each budget year will see the introduction of additional Army pro-

10. Sources include *Congressional Data Sheets, Selection Acquisition Reports,* and *Committee Staff Procurement Backup Books.*

grams. Thus, the programs that exist today will probably form a decreasingly smaller share of the Army's total procurement account with each procurement budget submitted after fiscal year 1987. In order to get a rough idea of how the share held by today's Army programs might decrease over the next few years, procurement spending from 1983 through 1987 was examined to see how the share decreased in years subsequent to 1983 (see Table 8).

The programs in the accounts that include the major weapon systems--aircraft, missiles, and weapons and tracked combat vehicles--remain relatively constant, with 1983 programs accounting for almost 100 percent in 1983 and at least 90 percent of the corresponding account for all years from 1984 through 1987. The other procurement account, which purchases all of the Army's noncombat systems, behaves differently, however. The OPA programs for which CBO has detailed data made up only 93 percent of the total OPA budget in 1983 and their portion rapidly decreased to less than 75 percent by 1987.

Each procurement account was projected separately. The share attributed to those programs for which CBO has detailed five-year data in

TABLE 8. PERCENT OF EACH APPROPRIATION ACCOUNT DEVOTED TO LINE ITEM SUMS FOR SPECIFIED PROGRAMS a/
(By fiscal year)

Procurement Appropriation Accounts	1983	1984	1985	1986	1987
Aircraft	97	100	95	100	98
Missiles	98	88	89	89	91
Weapons and Tracked Combat Vehicles	100	96	96	94	95
Other	93	85	80	75	74
Tactical and Support Vehicles	99	97	99	92	92
Communications and Electronics	90	85	78	74	74
Other Support Equipment	90	74	61	65	65

SOURCE: Congressional Budget Office, based on data in documents submitted in support of the President's budgets for fiscal years 1983, 1984, 1985, 1986, and 1987.

a. Based on programs included in the President's budget for fiscal year 1983.

each account was assumed to be the same for that account in years subsequent to 1988 as the 1983 programs accounted for in corresponding years after 1984. The other procurement account was divided into its three subactivities to try to treat independently the different types of equipment--vehicles; electronic gear; and other support equipment, such as trailers, bulldozers, and chemical masks. Finally, it must be remembered that only a small portion of each procurement account is projected based on a share of that account rather than on detailed budget data. 11/ The maximum percentage of a single account or subactivity that was projected on a share basis was 35 percent for other support equipment--a subactivity in the OPA account--for 1990 and 1991. When combined with the other OPA subactivities, the unspecified portion of the OPA account would comprise 26 percent of the total OPA account in 1990 and 1991. 12/ Taken together, however, only 15 percent of the total Army procurement account in 1990 and 1991 was projected using this method which, in turn, ultimately would represent about 4 percent of the total Army budget in 1990 and 1991.

The results of these projections are summarized in Table 9. It can be seen that the Army's procurement in these four procurement accounts is projected to grow from $14.0 billion in 1987 to $20 billion in 1991. The account that would experience the most significant growth would be the OPA, which includes the Army's communciations and electronics gear (see Figure 4). This increase reflects the Army's plans during the next five years to shift away from procuring more combat weapons and toward purchasing systems that support those weapons.

Two more conservative approaches to projecting the Army's procurement account would hold either the share or the dollar amount of unspecified funds in each specific procurement account constant at the fiscal year 1987 level. The effect of these approaches would be to stifle the growth in the OPA account, in particular, and in the procurement budget as a whole. Table 10 presents a comparison of 1991 funding in the four major procurement accounts, using three different methods of projecting Army procurement through 1991.

Using the more conservative methods would reduce 1991 procurement funding in these four procurement accounts from the $20.0 billion estimated

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11. The 3 percent of procurement that was projected without any supporting detailed data accounted for only 0.5 percent of the total Army budget for 1987.

12. Unspecified funds refer to those that are not based on detailed data from documents supporting the President's budget for fiscal year 1987.

using the first method, to $17.9 billion with the share for unspecified funding held constant and $17.4 billion with the total amount of dollars for unspecified funding held constant. Since it is likely that the Army will continue to introduce new procurement programs into its budget, particularly in the other procurement account, subsequent discussions in this paper will use the procurement projections produced by the varying share method.

Fielding Goals. An additional adjustment was made to align individual program funding for the 10 programs for which the Army provided detailed fielding goals. The funding levels summarized in Table 9 reflect the Army's planned procurement as of the President's fiscal year 1987 budget submission and are not totally in agreement with the Army's fielding goals for the 10 major systems. Indeed, the Army's planned procurement of some of the weapons, such as the M1 tank and Bradley Fighting Vehicle, provides more

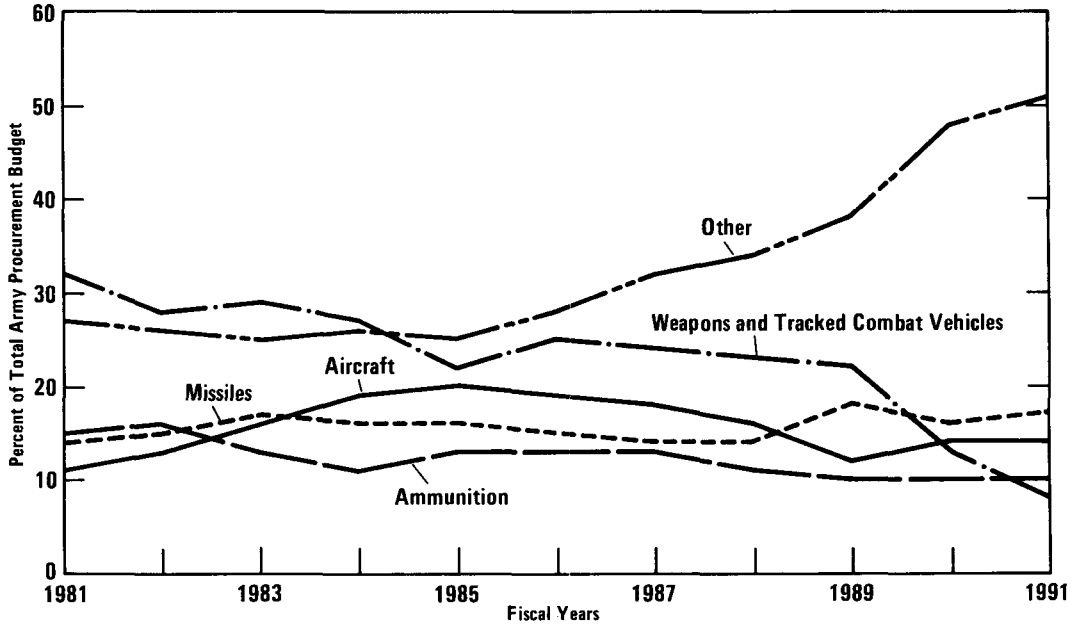
TABLE 9. PROJECTED FUNDING NEEDS IN PROCUREMENT, FISCAL YEARS 1986-1991 a/
(In billions of 1987 dollars)

Procurement Appropriation Accounts	Appropriated b/ 1986	Appropriated b/ 1987	Requested c/ 1988	Projected 1989	Projected 1990	Projected 1991
Aircraft	3.5	2.8	3.3	2.6	3.0	3.2
Missiles	2.9	2.2	2.9	3.9	3.4	3.7
Weapons and Tracked Combat Vehicles	4.6	3.8	4.8	4.9	2.8	1.7
Other						
Tactical and Support Vehicles	0.9	0.8	1.0	0.9	1.6	1.7
Communications and Electronics	2.9	3.1	4.2	5.1	6.0	6.6
Other Support Equipment	1.3	1.3	1.7	2.4	2.7	3.1
Subtotal, Other	5.1	5.2	6.9	8.4	10.3	11.4
Total	16.1	14.0	17.9	19.8	19.5	20.0

SOURCE: Congressional Budget Office, based on documents submitted in support of the President's fiscal year 1987 budget.

a. Does not include the ammunition account.
b. Funding levels reflect those actually appropriated by the Congress.
c. Funding levels reflect those requested in the President's fiscal year 1987 budget.

Figure 4.
Distribution of Army Procurement Funds, Fiscal Years 1981-1991



SOURCE: Congressional Budget Office based on Office of the Assistant Secretary of Defense (Comptroller), *National Defense Budget Estimates for FY 1984* through *FY 1987;* and budget documents in support of the President's budget for fiscal year 1987; and letter from Lt. Gen. Carl E. Vuono Deputy Chief of Staff for Operations and Plans to Congressional Budget Office, Robert Hale (February 1986).

modern weapons at earlier dates than called for by its fielding goals. This apparently reflects an Army desire to introduce modern tanks and fighting vehicles into its inventory as rapidly as possible. On the other hand, the Army's programmed procurement of AH-64 helicopters would not provide enough new helicopters to meet the fielding goals. Therefore, CBO adjusted the Army's planned procurement of the 10 major weapons systems to bring it into alignment with the specific deployment goals provided by the Army. This adjustment yielded some changes to the overall procurement funding levels (see Table 11). The net result of aligning individual weapons programs with the goals for their deployment is a slight increase in procurement spending in fiscal year 1988 and more substantial increases in the subsequent years. 13/

Ammunition War Reserves. The ammunition account of the procurement appropriation provides funding to purchase all of the Army's ammunition for

13. Adjustments to individual programs assumed that the cost of individual weapons systems would remain at the 1987 level, regardless of the number of systems purchased annually. Although changing annual procurement quantities might affect the weapon's unit cost, the overall effect would be insignificant.